Barlean's Organic Oils, LLC – Gateway Pacific Terminal Scoping Comment

December 26, 2012

Barlean's Organic Oils is a Whatcom County company established in 1989, located just outside Ferndale, Washington and less than 5 miles from the proposed Gateway Pacific Terminal (GPT) site. In the past 5 years, our business has grown rapidly and will surpass $70 million in sales in fiscal 2012. The Barlean's companies now provide over 150 direct jobs to residents of Whatcom County, and because of our rapid growth, we are also creating numbers of indirect construction-related jobs (we anticipate building at least one and possibly two additional buildings in the coming year).

Barlean's produces certified organic health supplement products, specifically omega-3 flax oil and fish oil products, as well as borage oil, rosemary oil, greens mixtures, and other related health supplements, shipping in excess of a half-million gallons of fresh omega-3 products to all corners of the world, with our primary markets in the United States and Canada.

In order to press and manufacture seed oil products for human consumption, a spotlessly clean environment is required. We undergo periodic inspections to review the cleanliness of the Barlean's Organic Oils plant from such agencies as the US Food and Drug Administration, the Washington Department of Health, and a variety of our larger customers. We are committed to satisfying or surpassing the requirements our customers and consumers have, as well as stipulations of relevant national and international legislation on quality and food safety. The reliability of the plant maintaining cleanliness standards is also essential to our more than 20-year history of manufacturing the freshest flax and other oil products to promote good health.

Figure 1. One of five liquid product bottling lines at Barlean's Organic Oils.

Proposal from SSA Marine for the Gateway Pacific Terminal

According to the Gateway Pacific Terminal (GPT) permit application (chapter 4.3.1.2), "For coal, these would include **a single large, open-air stockyard serviced by stacking and reclaiming machines** (called "stacker/reclaimers") and outloading/inloading conveyor lines with surge bins. The stockyard would be created on a "patio"—an approximately 80-acre, unpaved, level area with gravel-surfaced lanes between commodity stockpiles. If commodities were stored in continuous piles, the total capacity of the stockyard would be approximately 2.75 million metric tons. Initially, two stacker/reclaimers would service three stockpiles (approximately 1.25 million metric tons). At maximum capacity, the East Loop stockyard would have the capacity for five stockpiles, managed with four stacker/reclaimer lines. Stockpiles would be approximately 2,500 feet long and up to about 62 feet high; the stacker/reclaimers would be approximately 110 feet high. The rail-mounted stacker/reclaimers would move along the lanes between stockpiles to service the stockpiles. Commodities would be stockpiled by the stacker/reclaimers." [emphasis added]

It is reasonably forseeable that coal dust will be emitted by these open-air stockpiles of coal. The proponents of the GPT project, Pacific International Terminals, recognize that dust will need to be controlled and they propose to mitigate by water cannon, surfactant, and wind screens. To quote from the GPT permit application again (chapter 4.5.5.3), "Uncovered storage of large quantities of dry particulate commodities has the potential to generate windblown dust. Dust control measures to be implemented at stockpiles would consist of a combination of compaction, fogging systems, water sprays, perimeter soil berms, regular pavement sweeping, and/or application of chemical surfactants. A water cannon would be located along the stacker/reclaimer lanes in the stockpile patio area. The water cannon would also be used to apply surfactant for additional dust suppression in the stockpile area when needed. Windscreens would be employed as needed to minimize dust generation during operations."

However, the consistency of coal dust can be similar to talcum powder, particularly after it has been crushed and compacted by heavy machinery. Can a substance with that fine a consistency be 100% contained?

Comparable Facility to the Proposed Gateway Pacific Terminal

The Westshore coal terminal near Tsawwassen, British Columbia ships about 30 million metric tons per year. It is located at the end of a peninsula jutting into the Strait of Georgia just north of the Tsawwassen ferry terminal about 10 miles south of downtown Vancouver. Residents of Point Roberts, a beachfront community three miles to the south, have complained that coal dust has coated homes, patio furniture, and boats moored in the local marina (Erik Olson, "Westshore provides glimpse of Longview's potential future with coal," *The Daily News*, February 12, 2011, http://tdn.com/news/local/article_35ad9c0c-3634-11e0-8eea-001cc4c03286.html).

A comprehensive 2001 study of coal dust emissions in Canada found that the Westshore terminal emits roughly 715 metric tons of coal dust a year (Douglas L. Cope and Kamal K. Bhattacharyya, *A Study of Fugitive Coal Dust Emissions in Canada*, "Chapter 8: Coal Terminals: Fugitive Dust Emissions and Control," prepared for The Canadian Council of Ministers of the Environment, November 2001.).

Figure 2. A gust of wind stirred up coal dust at Westshore Terminal on April 12, 2012. Photograph by: Jerry Bierens, for Delta Optimist.

Another study conducted by researchers at the University of British Columbia found that the concentrations of coal dust in the vicinity of the terminal had doubled from 1977 to 1999 (Ryan Johnson and R.M. Bustin, "Coal dust dispersal around a marine coal terminal (1977–1999), British Columbia: The fate of coal dust in the marine environment," *International Journal of Coal Geology*, Volume 68, Issues 1-2, 1 August 2006, Pages 57-69, http://www.sciencedirect.com/science/article/pii/S0166516206000206).

These facts constitute a powerful statement that open-air coal terminals are not benign entities.

Barlean's Organic Oils' Concerns

Our immediate question would be whether coal dust would reach the Barlean's plant from the site of the Gateway Pacific Terminal. Notably, the Barlean's plant is downwind from the GPT facility in relation to significant northwest winds, especially in summer when the driest conditions occur. Some damaging storms originate out of the northwest and travel towards the southwest on that northwest wind. The Barlean's plant is within 5 miles of the proposed GPT facility making it likely that coal dust will reach the plant, particularly in stormy conditions.

Outdoor equipment is a major concern and the following images show key points of vulnerability. Figure 3 shows the overhead auger piping that moves raw flax seed from the storage building at the west side of the facility into the seed pressing floor. The overall outside length of auger pipe is approximately 60 feet. Figure 4 shows the single hopper where flax and other seeds are offloaded from trucks to be augered upward to bins inside the storage building. Figure 5 displays the flour feed pipe that is used to fill bulk flax flour into trucks. Two flax flour storage silos are also shown in figure 5. Figure 6 is taken on the north side of the Barlean's Organic Oils facility where the encapsulation lines are housed and shows the air intake equipment for a BryAir controlled environment air filtration system. Because of the exacting requirements for production of capsules for human consumption, the BryAir controlled air treatment system is installed where all incoming air is filtered, then maintained at precise temperature and humidity levels.

Figure 3. Overhead augering system and outside seed hoppers. West side of facility.

Figure 4. Seed delivery point. The cover on the concrete floor is where seed is fed to augers that fill the indoor storage facility. Southwest corner of facility.

Figure 5. Outdoor flour silos, truck loading spout, and blower system. Southwest corner of facility.

Figure 6. Outdoor air intake for BryAir controlled environment system for Encapsulation lines in Building D. North side of facility.

Our Request of the Governing Agencies in Compiling the Environmental Impact Statement

We request that the environmental impact statement consider the following key elements.

1) How far would microscopic coal dust travel from the open-air storage piles at the proposed GPT site?
2) What effect would microscopic coal dust from the GPT have on the ability of Barlean's Organic Oils to maintain a spotlessly clean environment?
3) What effect would microscopic coal dust from the GPT have on operating machinery outside the Barlean's Organic Oils manufacturing plant? Inside the plant?
4) What impact would microscopic coal dust from the GPT have on the raw materials used in Barlean's Organic Oils' products?
5) What impact would microscopic coal dust from the GPT have on Barlean's Organic Oils products' standards and purity?
6) What impact would microscopic coal dust from the GPT have on Barlean's Organic Oils working staff members?
7) As a mitigation if one or more potential dust impacts on Barlean's Organic Oils are deemed significant adverse impacts, we request that the environmental impact statement address the question of completely enclosing the coal storage piles and stacker/reclaimer operations, such as has been done at coal terminals in Amsterdam, Latvia, and Taiwan. If this cannot be done and the adverse impacts are deemed significant, we request that permits for the terminal be denied.